

News Release

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Atlas Rocket Successfully Launches Navy UHF Follow-On Satellite

CAPE CANAVERAL AIR STATION -- The U.S. Navy's eighth UHF Follow-On (UFO) communications satellite rocketed into a 12,968 nautical mile-high orbit Monday atop a Lockheed Martin Atlas II from launch pad 36A here at 4:32 p.m. EST. The Atlas/Centaur launch vehicle were designated AC-132. The communications satellite will be stationed at 172 degrees East longitude over the Pacific Ocean.



AC-132, a Lockheed Martin Atlas II lifts off from Cape Canaveral Air Station Florida with the U.S. Navy UHF Follow-On (F-8) communications satellite. *Photo courtesy Lockheed Martin Corporation*.



A Lockheed Martin Atlas II lifts off from Cape Canaveral Air Station Florida with the US Navy UHF Follow-On (F-8) communications satellite. Photo courtesy USAF 45th Space Wing.

This satellite is the first of three to carry the Global Broadcast Service payload. The GBS payload provides the Defense Department with four 130-watt, 24 mega-bits-persecond (Mbps) military Ka-band (30/20 GHz) transponders. This modification results in a 96 Mbps capability per satellite, a vast increase over today's warfighter capability.

The Centaur On-board Navigation Calculations indicate that the satellite was initially placed into an orbit with an apogee of 12, 968 nautical miles, a perigee of 119.9 nautical miles with an inclination of 27.0 degrees. This better than expected performance by the Centaur upper stage will increase the service life of the satellite for the U.S. Navy.

The Atlas II and Centaur upper stage are produced in San Diego and launched by Lockheed Martin Astronautics and International Launch Services.

High-power satellite transponders, which provide high-speed, wideband, simplex broadcast signals, characterize a Global Broadcast Service (GBS). This information is disseminated to small, 22-inch-diameter, mobile, and affordable tactical terminals. Broadcast management centers provide the information management to package, schedule, and deliver the broadcast product. They also respond to user information requests from the field. Typical information products include video, mapping, charting and geodesy, imagery, weather, and digital data.

To provide an interim GBS capability, the U.S. Navy has contracted with Hughes Space and Communications Company (HSC) to add GBS capabilities to the UHF Follow-On (UHF F/O) satellites 8, 9, and 10, the last three in a series it is building under a total \$1.9 billion contract with the Navy's Program Executive Office for Space, Communications, and Sensors.

The UHF Follow-On satellites have replaced the Fleet Satellite Communications (FLTSATCOM) and the Hughes-built Leasat spacecraft, which had supported the Navy's global communications network serving ships at sea and a variety of other U.S. military fixed and mobile terminals. Hughes won the initial UHF Follow-On contract in July 1988 for one satellite, with options for nine more, all of which had been exercised by January 1994. In March 1996, the Navy ordered the special GBS payloads for F8, F9, and F10, bringing the total contract value to \$1.85 billion.

This launch was a joint effort of the US Navy's Program Executive Office for Space, Communications and Sensors, the Air Force's 3rd Space Launch Squadron at Cape Canaveral Air Station, Hughes Space and Communications Company, Lockheed Martin Astronautics, International Launch Services, and Astrotech. The ground terminals to communicate with the satellite are managed by a GBS Joint Program Office at Los Angeles Air Force Base.

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